

# Construction Safety Presentation

**Welcome to the NASA/John H. Glenn Research Center at Lewis Field. One of ten NASA centers across the country, the NASA/Glenn Research Center—or GRC—is a world-class aerospace technology facility.**

# Construction Safety Presentation

**Located on three hundred and sixty acres, the NASA/Glenn Research Center has over one hundred buildings and more than five hundred specialized research and test facilities containing many diverse and hazardous materials.**

# Construction Safety Presentation

**Whether it's studying the properties of combustible fluids or performing daily maintenance and repairs, the key to any successful mission at NASA/Glenn starts with safety.**

# Construction Safety Presentation

- **This presentation will highlight, the key points of contact in the event of an emergency and how to report any accidents, near misses and unsafe work site conditions. It will also introduce you to the NASA/Glenn offices that can provide assistance and consultation to independent construction contractors.**

# Construction Safety Presentation

- It is the contractor's responsibility to ensure that anyone under their supervision follows the Site Specific Health and Safety Plan and complies with all health, safety and environmental rules and regulations.

# Construction Safety Presentation

- **If you have any questions about the material in this Presentation, ask your site superintendent or your Contracting Officer's Technical Representative, also known as your C. O. T. R. You may also call the NASA/Glenn 24-hour Environmental, Health and Safety Helpline at 3-8848 from any GRC phone or dial 216-433-8848 from any cell or pay phone. You may also refer to the Glenn Safety Manual or the Environmental Program Manual located on the Glenn Safety Branch's home page at [www-osma.lerc.nasa.gov](http://www-osma.lerc.nasa.gov) .**

# Construction Safety Presentation

- **Emergency assistance is available at NASA/Glenn 24 hours a day, seven days a week. To report an emergency, dial 9-1-1 on any internal GRC phone. A GRC dispatcher will take your call and determine the appropriate response to your emergency. The dispatcher will send a response team and place any necessary calls to emergency crews.**
- **If you do not have access to a GRC phone, dial 216-433-8888. This includes all calls made from cell phones and pay phones.**



# Construction Safety Presentation

**When reporting an emergency, be prepared to tell the dispatcher the following information:**

- **The nature of your emergency. . .**
- **Your name and company. . .**
- **Your location or building number. . .**
- **The location of the emergency . . .**
- **And in the case of a hazardous materials incident, be prepared to tell the dispatcher the type of spill, the size of the spill, the location of the spill and any related injuries. Also, if possible, remain on the line with the dispatcher.**





# Construction Safety Presentation

- If you need to evacuate your work site, pull the fire alarm and exit the site using the designated evacuation routes. Always know at least two ways out of your work site.
- The fire alarm will automatically signal a GRC dispatcher. Go to the designated safe area and wait for further instructions.
- If your are in a location without a telephone, you must be able to contact the GRC dispatcher. NASA/Glenn will provide radio communication. However, this must be pre-arranged.



# Construction Safety Presentation

- **Report all accidents, injuries, near misses and unsafe work site conditions to your site superintendent and C.O.T.R. You may also call the Environmental Health and Safety Helpline at 3-8848 from any GRC phone or dial 216-433-8848 from any cell or pay phone.**



# Construction Safety Presentation

- **The Security Management Office is responsible for security clearances, vehicle and personnel inspections, traffic control and vehicle accident investigations. Officers also issue visitor badges, as well as vehicle and property passes.**
- **Once you have stopped at the main gate, go to the security office and sign in. Show the officer your driver's license and sign the visitors' sign-in sheet.**
- **You will receive an I.D. badge and, in some cases, a copy of the safety/emergency reference pamphlet. Your I.D. badge must be visible at all times.**



# Construction Safety Presentation

- **The Glenn Safety Branch—or GSB—is responsible for the administration of the construction program.**
- **The GSB provides assistance and consultation to contractors.**
- **Reviews Site Specific Health and Safety Plans.**
- **Reviews any necessary permits.**
- **Follow up on Safety violations and incidents.**
- **And conducts random safety inspections.**



# Construction Safety Presentation

- **The Facilities and Test Engineering Division is responsible for the overall construction and safety compliance of contractors. Inspectors work with the Glenn Safety Branch in performing joint site inspections.**
- **Your primary contact with the Facilities and Test Engineering Division is your Contracting Officer's Technical Representative—or C.O.T.R.**
- **Your C.O.T.R. oversees on-site construction activities and enforces compliance with health, safety and environmental rules and regulations. Your C.O.T.R., or an alternate, is available to support your project at all times.**



# Construction Safety Presentation

- All contractors and subcontractors who work at NASA/Glenn are required to manage their operations in a manner that will eliminate or minimize potential hazards and prevent accidents, injuries to people, environmental releases, property damage and loss of research operating time.
- NASA/Glenn adheres to all health, safety and environmental rules and regulations. Contractors and subs are also required to adhere to these rules and regulations, as well as meet the requirements in the Glenn Safety Manual and the Environmental Program Manual.



# Construction Safety Presentation

- **Glenn, like all other federal buildings and work sites, is designated as a non-smoking facility. Smoking is prohibited in government-owned buildings, vehicles and near chemical tanks or storage containers.**
- **Do not park in red or yellow curb areas, Handicap parking spaces. Loading docks. Or near fire hydrants. Vehicles parked in these areas will be ticketed and towed.**



# Construction Safety Presentation

- Obey the fifteen mile per hour speed limit on the lab and the ten-mile per hour speed limit at the security gates. Also, obey all traffic signals. And allow pedestrians in crosswalks the right of way.
- Keep unauthorized personnel out of your work site. Request help from the GSB as required to help enforce this requirement. Always barricade your site.
- Barricades must be able to withstand two hundred pounds of lateral force. Orange cones and yellow caution tape are not adequate barricades. Glenn uses ropes and chains with flags to designate research barricades. Do not violate research barricades or the barricades of other contractors.





# Construction Safety Presentation

**Some potential hazards at Glenn include, but not limited to the following:**

- **Fall hazards**
- **Confined space**
- **Electric shock**
- **Lead**
- **Mercury**
- **Asbestos**
- **Cryogenics**
- **Hot work**
- **High pressure systems**
- **Flammables**
- **Toxins**
- **Compressed gases**
- **And noise.**



# Construction Safety Presentation

- **To minimize hazards, all construction projects are reviewed by a Glenn Project Manager, the Glenn Safety Branch, the Environmental Management Office and your C.O.T.R. If you have a question about hazards at your work site, contact your C.O.T.R. at 3-3976 from any GRC phone or dial 216-433-3976 from any cell or pay phone.**



# Construction Safety Presentation

- Prior to any welding, burning or soldering, you must obtain “hot work” authorization. Call the Glenn Safety Branch at 3-2088 for “hot work” permits or dial 216-433-2088 from any cell or pay phone.
- Other activities that require permits or work plans include, but not limited to the following:
  - Confined space entry. . .
  - Lockout-tagout. . .
  - Electrical substation entry. . .
  - Use of lifting devices and cranes. . .
  - Use of radioactive sources. . .
  - Use of lasers.
  - Excavations.
  - Work at heights above six feet. . .



# Construction Safety Presentation

- **Special training may also be required for these activities. Contractors are responsible for training anyone under their supervision before they start any work at NASA/Glenn.**
- **For more information on activities that require permits or special training, refer to the Glenn Safety Manual or the Environmental Program Manual. You may also ask your site superintendent or C.O.T.R.**



# Construction Safety Presentation

- Your company has submitted a Site Specific Health and Safety Plan to Glenn. This plan outlines the work that you will perform and how necessary health, safety and environmental requirements will be met for your work site. This plan helps identifies any potential hazards associated with your work and how those hazards can be mitigated and/or controled. Any deviation from this plan can result in an order to stop work.
- **You are required to read and sign this plan with your site superintendent prior to starting work.**
- **Know your company's safety goals and objectives.**
- **Review the description of work and the company's safety performance.**
- **Be aware of any safety training provided by your company.**



# Construction Safety Presentation

- Know all of the hazards at your work site. This includes the list of chemicals and flammables being used as well as any work that requires special equipment or permits. Only chemicals listed on the Site Specific Plan are permitted at the job site.
- If you need to make changes to your Site Specific Plan, you must submit an addendum to your C.O.T.R. prior to starting work involving the change.



# Construction Safety Presentation

- Review the list of personal protective equipment—or PPE—requirements. This section lists any personal protective equipment that you are required to wear at your site. This includes items, such as safety glasses, hard hats, boots, gloves and hearing protection.
- Also, know the Glenn contacts in case of an emergency. Keep a copy of these contacts with you at all times.



# Construction Safety Presentation

- Once you have reviewed the Site Specific Health and Safety Plan with your site superintendent and understand the job requirements, you must sign it. If you have any questions, ask your site superintendent or C.O.T.R.
- Some activities at Glenn require a designated “competent person” according to OSHA standards. Ensure that a competent person is designed and present when required and that this information is available upon request from a NASA representative.





# Construction Safety Presentation

- **OSHA requires that a “competent person” be designated and present during certain activities. A “competent person” is defined as “one who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees. Also, one who has the authorization to take prompt corrective measures to eliminate them.”**



# Construction Safety Presentation

- **Some activities also require a “competent person”. The “competent person” is required to:**
- **Supervise specific tasks according to OSHA standards. . .**
- **Recognize any hazards associated with the tasks in which they are considered to be “competent”. . .**
- **Ensure the safety of employees who are under their supervision. . .**
- **And make any necessary modifications to ensure site safety.**



# Construction Safety Presentation

- **Some examples of work that require a “competent person” include:**

**Roof work**

**Confined space**

**Scaffolding**

**Trenching**

**Fall protection**

**Use of respirators**

**Excavations**

**Lead Abatement**

**Asbestos Abatement**

**And electrical/mechanical or lockout/tagout.**



# Construction Safety Presentation

- Use the “buddy” system when working on any electrical or mechanical equipment. Before you start work, always de-energize the system, and make sure that it is properly locked out and tagged out.



# Construction Safety Presentation

- **Excavations deeper than five feet require a protective system. Surrounding soil must be classified per OSHA regulations.**

**Excavation entry is off-limits if the excavation contain water or if digging is in progress.**

**Sloping and benching must be done according to OSHA regulations.**

**Maintain good housekeeping practices. Clean up any debris and keep all roadways, walkways, aisles and exits clear.**



# Construction Safety Presentation

- All work sites at Glenn are required to have a site superintendent. The site superintendent is required to oversee all technical aspects of the job. . .
- Submit a Site Specific Health and Safety Plan to the C.O.T.R. before any work begins. . .
- Submit an Addendum to the C.O.T.R. for any changes in each Site Specific Health and Safety Plan. . .
- Verify that all employees are properly trained. . .
- And ensure that all employees view the **NASA/Glenn construction safety** Presentation prior to starting work.



# Construction Safety Presentation

- **Employees are required to: Follow the Site Specific Health and Safety Plan. . .**
- **And report any accidents, near misses and unsafe conditions to their site superintendent, C.O.T.R. or to the Environmental Health and Safety Helpline.**



# Construction Safety Presentation

- **The Glenn Safety Branch and the Environmental Management Office conduct frequent and random inspections of construction sites. Violations are documented and corrective measures will be taken immediately. The safety branch has stop-work authority and will shut down a job under any of the following conditions: If there is any deviation from the Site Specific Health and Safety Plan.**
- **If there are repeat violations by employees or subcontractors of any health, safety and environmental rules and regulations. Or if imminent danger exists at the work site.**





# Construction Safety Presentation

- **OSHA also has the right to make visits to Glenn and inspect construction activities and safety issues.**
- **In addition to OSHA fines, Glenn can withhold payment if a site is in violation of any health, safety and environmental rules and regulations.**



# Construction Safety Presentation

- **Let's review the key points of contact in the event of an emergency.**
- **To report an emergency, dial 9-1-1 on any internal GRC phone. A GRC dispatcher will take your call and determine the appropriate response to your emergency.**
- **If you do not have access to a GRC phone, dial 216-433-8888. This includes calls from cell phones and pay phones.**



# Construction Safety Presentation

- Know the key points of contact in the event of an emergency.
- Report any accidents, near misses or unsafe work site conditions.
- Utilize the services provided by Glenn offices.
- Read, understand, and sign your Site Specific Health and Safety Plan.
- Finally, report all accidents, injuries, near misses and unsafe work site conditions to your site superintendent and C.O.T.R. You may also call the Environmental Health and Safety Helpline at 3-8848 or dial 216-433-8848 from any cell or pay phone. It's up to you. Be responsible for your safety.



# Construction Safety Presentation

- If you have any further questions, ask your site superintendent, C.O.T.R. or refer to your Site Specific Health and Safety Plan. Remember mission success starts with safety.



# Certificate of Training for NASA Glenn Research Center's Construction Safety Presentation

This is to certify that \_\_\_\_\_ has viewed the

Print Name

NASA Glenn Research Center's "Construction Safety Presentation" on

\_\_\_\_\_ and will comply with all policies, procedures,

Date

and regulations as required.

\_\_\_\_\_  
Print name of company/organization

\_\_\_\_\_  
Print name of supervisor

\_\_\_\_\_  
Supervisor's signature